



## ILLINOIS EMERGENCY MANAGEMENT AGENCY

### MEMORANDUM

DATE: 8-2-19

TO: Kelly Horn

FROM: Kelly Grahm

RE: Site Summary Silbert Watch Company Sites, 1409 Dundee Ave, and 670 Stewart Ave, Elgin

Agency personnel conducted a radium site evaluation of the above captioned sites on July 31, 2019. The 1409 Dundee property was the location of the Silbert Watch Company from 1954 to 1971. The operation included the painting of radium dials and watch hands. Under IDNS, personnel had previously evaluated the site and a portion of the adjacent property (670 Stewart) in 1988 and there are some records of the work that was done at the time. There is a single photo of the building from 1988 and the building appears in poor condition. There are no records of remediation.

After the Silbert Company ceased use of the property, the building housed a mattress store and was eventually involved in a fire that resulted in the building being demolished (this based on a street side interview with an Elgin police officer who grew up and lived in the neighborhood). The building disappeared from Google Earth imagery between 1994 and 1999.

1409 Dundee is owned by Mr. William Hertz of Stacey Construction, who was present during the first portion of our survey.

1409 Dundee Ave was subdivided into 6 grids of roughly equal size. A walkover survey was performed with unshielded 2x2 NaI detectors and 2221 instruments, one of which was coupled to GPS. In general, most of the results were less than 2 times background, with elevated areas of 3-4 times background along the property line on the NE and SE corners, and one area about midway up the lot and about 10 feet off the property line which approximated the location of the 1988 survey hot spots. These locations were sampled as well. There was also an area in the NE corner that was in the tree line that straddled the property line that was more than 10 times background. This area was also sampled. A total of 4 samples were collected from this property. Based on local conditions and the sampling tools available, none of the samples were advanced beyond 6 inches.

670 Stewart Ave is owned by Habitat for Humanity and their representative Tom Clausen was present during the initial portion of our survey of the Dundee lot.

The 670 Stewart property was divided into a total of 6 grids and similarly surveyed. In general, the property was less than 2 times background with the exception of 4 areas having elevated activity. Two of the four elevated areas line up on the 1409 and 670 property. Further, an elevated area in the northern tree line that approached 30 times the background count rate was observed. All of these locations (3) were sampled, but only 2 of them we were able to collect both a 0-6" interval and a 6-12" interval.

Dose rates over both properties observed a 4-7 microR/hr range, and included both close contact and 1 meter level measurements. In the elevated area to the north on the property line and in the tree line the dose rate was 50 microR/hr at close contact. In the elevated area to the south, the dose rate was 20 microR/hr at close contact.

General impression is that the 1409 Dundee property was likely demolished after the fire and a gravel layer was installed that we couldn't penetrate with our sampling tools and topped with a fairly uniform (and typical) 6 inches of topsoil. As such, there is probably something below the gravel and further study is warranted.

Regarding the 670 Stewart lot, it appears based on historical photos and the 1988 IDNS survey that the lot was either intentionally or accidentally contaminated by the Silbert operation as the driveway was on the property line. There is clearly something in the tree line that was either intentionally placed there years ago, or was wind-blown during operations. Further study is warranted in this area as well, but an extensive clearing and grubbing effort is necessary first.

All samples were submitted to the Radiochemistry Laboratory for gamma spectral analysis of total radium, radium-226 and radium-228. Results should be available in approximately 1-2 weeks.